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## Technology Adoption among Adolescents: A Consumer Socialization perspective

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### EXTENDED ABSTRACT

#### Introduction and motivation for the research

Teenagers have emerged as the prominent users of the Internet, social media, smartphones and tablets. The teenagers not only aspire for the new products (or gadgets) because of ‘coolness’ quotient (“Study: Teens are using”, 2016), but also transforming into the early adopters of the latest smartphones apps such as Instagram, Tumblr and Pinterest. The vast amount of research on the technology adoption centers around the technology specific characteristics and is inclined toward the consequences aspect of the technology usage (Davis, 1989; Venkatesh, Morris, Davis, & Davis, 2003), and also ignores the teenagers segment.

However, the marketing literature acknowledges the prominence of adolescents as individual consumers and have widely used the consumer socialization framework to understand their consumer skills (Moschis & Churchill, 1978). The theoretical foundation of this model are based on the social learning and cognitive development theories to understand and explain the complex process of cognitive and behavioral development of children. The socialization agents (e.g., parents, peers and mass media) are the immediate environmental factors who have the most interactions with the adolescents and have significant impact on the marketing relevant parameters such as consumer knowledge, activism, skepticism toward advertising and materialism (Mangleburg & Bristol, 1998; Moschis & Churchill, 1978). The agents also influence the adolescent behavior in the context of new technology environment, for example privacy concerns in using the Internet and social media, and engaging in music piracy on the Internet (Feng & Xie, 2014; Yang & Wang, 2015).

Given this discussion, we can conclude that adolescents are an influential consumer segment, especially for the technology related products, and their behavior can be influenced by various socialization agents. The construct Technology readiness, which is defined as “people’s propensity to embrace and use new technologies for accomplishing goals in home life and at work” (Parasuraman 2000, p. 308) has been used to measure the technology adoption intentions. The modified version TRI 2.0 has been developed to align with the cotemporary cutting-edge technology landscape (Parasuraman & Colby, 2015) and which fits the objectives of this study. Ours aim is to examine the role of socialization process which is specific to the individual, hence the emphasis is on the intrinsic behavioral aspect instead of characteristics of the technology.

#### Conceptual framework and hypotheses

Figure 1 presents the conceptual model of this study with hypotheses. The adolescents develop more informational processing and cognitive skills as they mature. Hence, they will be more open to adopt the new technology. The parents influence has been studied using the family communication patterns (FCP), which has two dimensions: concept-oriented communication (COC) and socio-oriented communication (SOC). COC parents favor autonomy and open discussion with children, and SOC parents prefer to have more control and monitoring of the children (Ritchie, 1991). The adolescents are also susceptible to the normative and informative peer influence. They may trust their friend as important source of information (informative) or they behave to meet the norms and expectations of the peers (normative). Similarly, the mass media (TV, newspaper, radio, the Internet and magazines) are the vital source of information and marketing communications. The adolescents are faced with enormous amount of information

by exposure to these sources. The Technology readiness construct has two underlying dimensions – motivators and inhibitors. The motivators positively affect the adoption by focusing on the positive aspects of technology such as improving productivity and transportation, whereas inhibitors undermines the adoption by showcasing the negative effects such as addiction, and lack of personal touch. Therefore, we derive following hypotheses:

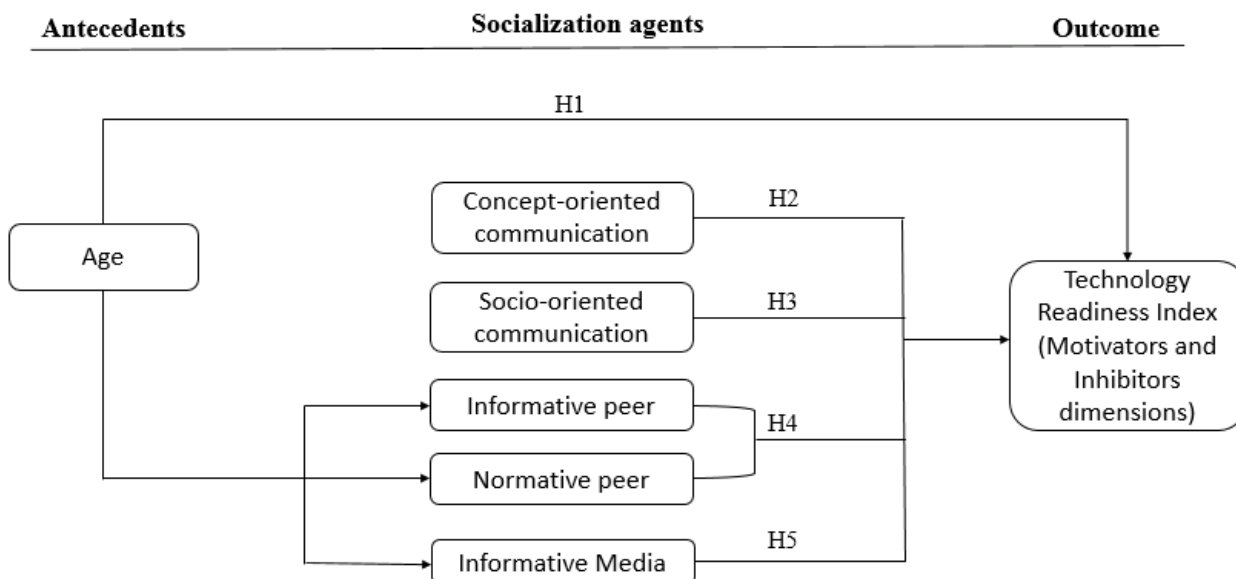
*H1: Age is positively related to (a) motivators, and (b) Technology readiness.*

*H2: Concept-oriented communication is positively related to (a) motivators, and (b) Technology readiness.*

*H3: Socio-oriented communication is (a) positively related to inhibitors, and (b) negatively related to Technology readiness.*

*H4: Peer influence (informative and normative influence) is positively related to (a) motivators, and (b) Technology readiness.*

*H5: Media influence (informative) is positively related to (a) motivators, and (b) Technology readiness.*



**Figure 1: Conceptual model**

### Research Methodology

The data were collected from the school students in the classroom settings after getting the required approvals from the school authorities. A total of 341 useable responses were used in the final analysis (average age = 15.5 years, 37.1% females). The PLS analysis was conducted using the SmartPLS 3.2.4 software with 5000 bootstrapping samples. The model were checked for reliability and validity measures (Composite reliability, AVE, Fornell-Larcker criteria and common method variance).

**Results.** Age shows a negative significant relation ( $b = -0.17$ ) with the normative peer influence, similar to findings by Mangleburg et al. (2004), and marginally significant but positive relation ( $b = 0.09$ ,  $p = 0.09$ , H1a) with the motivators. However, the path between age and TR is not significant (H1b). The concept-oriented communication has a significant positive relationship ( $b = 0.11$ , H2a) with motivators but not with TR ( $b = 0.02$ ,  $p = 0.86$ , H2b). The socio-oriented communication shows a significant effect on the inhibitors ( $b = 0.10$ , H3a) and a negative association with TR ( $b$

= -0.10, H3b). The inhibitors undermine the TR and are reverse coded to arrive final TR score, hence the results suggest the overall negative effect on the children's inclination toward new technologies.

The informative peer does not exhibit any significant relation with motivators, inhibitors or TR. Nevertheless, the normative peer demonstrates a positive association with motivators ( $b = 0.13$ ) and TR ( $b = 0.13$ ), thus partially supporting the H4. The informative media shows the strongest positive relationship with motivator ( $b = 0.25$ , H5a) and TR ( $b = 0.19$ , H5b).

**Discussion** The media emerges as the strongest influencer, followed by normative peer and FCP. The FCP have opposite effect on the TR and its dimensions.

This paper contributes to the available literature in two ways. First, to the best of our knowledge, this study provides a comprehensive and integrative perspective on the role of parents, peers and media as antecedents to the technology adoption behavior of the adolescents. This perspective is primarily interested in the effect of the individual specific immediate environmental factors rather than technology specific characteristics. Second, we aim to address the research gap specified by Parasuraman and Colby (2015) about the role of demographic factors (age), inherent traits and genetic factors (parents) on the TR. The importance of mass media should help in marketers to tailor their marketing communication to target adolescents in more effective ways and also try to change the mindset of parents to allow and motivate their children to embrace new technology.

This study has few limitations. Though the study was conducted in schools where the mode of education is the English language, however, we cannot completely remove the possibility that few children did not understand some of the words. Hence, possibly by translating into local languages will add more strength to results.

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